

(b) subsequently measuring the effect of the alteration on the death of the cell, and therefrom identifying a protein that regulates dorsal root ganglion cell death.

69. (New) A method for screening for a protein that regulates dorsal root ganglion cell death, comprising:

(a) altering the level of expression of a protein within a cell according to claim 12; and

(b) subsequently measuring the effect of the alteration on the death of the cell, and therefrom identifying a protein that regulates dorsal root ganglion cell death.

### REMARKS

Claims 6-16 are pending in the current application. Reconsideration of the present application in view of the following remarks is respectfully requested. Upon entry of these amendments, claims 6-16 and 47-69 will be pending. New claims 47-69 have been added. These claims are the same as previous claims 17-39, canceled in error by Applicants in response to the Restriction Requirement mailed July 20, 2000, except that these claims are now directed only to Group II matter as elected by Applicants in their Response mailed September 5, 2000. As these claims are directed to the same conditionally-immortalized dorsal root ganglion progenitor cells as were originally-filed claims 17-39, support for these claims lies in the specification as originally filed. Claims 6, 9, 10 and 12-14 have been amended. Support in the specification for amended claims 6, 9, 10 and 12-14 may be found as shown in the following table:

<u>Claim</u>	<u>Support in specification</u>
6	p. 2, l. 27-p.3, l.4, 6-7;
9	p. 3, ll. 4-6;
10	p. 11, ll. 15-17;
12	p. 4, l. 27 - p. 5, l. 12; p. 11, ll. 15-17; p. 13, ll. 12-22; Example 4;
13	Example 4;
14	Example 4.

As set forth above, these claim amendments are supported by the specification and claims as originally filed, and no new matter has been introduced.


Claims 6, 9, 10 and 12-14 have been amended to more distinctly point out the subject matter of the Applicants' invention. Claim 6 now recites that the dorsal root ganglion cells to be conditionally-immortalized are to be transfected with an oncogene. Claim 9 has been amended to point out that said first and second surfaces are independently selected, and the recited substrate group has been placed in proper Markush format. Based on the amendment to claim 6, claim 10, already allowed by the Examiner, has been amended to recite a Markush group of specific oncogenes. Claim 12 has been amended to recite the condition under which the dorsal root ganglion progenitor cells are capable of differentiating, *i.e.*, upon substantial inhibition of the oncogene. As claims 13-16 depend from claim 12, this amendment should obviate the Examiner's concern on this basis regarding these claims as well. Claims 13 and 14 have been amended to recite that the rat or human dorsal root ganglion progenitor cells are transfected with an oncogene.

As noted above, new claims 47-69 are substantially the same as claims 17-39 as originally filed. Claims 17-39 were directed to both conditionally-immortalized dorsal root ganglion progenitor cells and conditionally-immortalized neural crest progenitor cells. In the Examiner's Restriction Requirement of July 20, 2000, the Examiner required election of claims directed to conditionally-immortalized dorsal root ganglion progenitor cells or conditionally-immortalized neural crest progenitor cells, and stated that "[c]laims 17-39 embrace the inventions of Group I and II and will therefore be examined with either one of Group I or II only to the extent that they encompass the elected subject matter." In their September 5, 2000 Response, Applicants elected Group II, claims 6-39, directed to dorsal root ganglion cells. Due to a misreading of the quoted sentence, Applicants also canceled claims 17-39 without prejudice. Applicants now wish to add these claims as claims 47-69, in such form so as to be directed only to conditionally-immortalized dorsal root ganglion progenitor cells and not conditionally-immortalized neural crest progenitor cells.

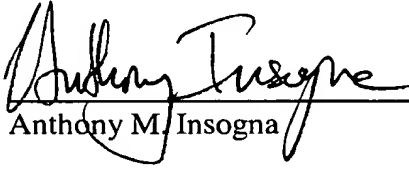
Entry of the foregoing amendments and remarks into the file of the above-referenced patent application is respectfully requested. Applicants believe that each ground for rejection has been successfully overcome or obviated. After entry of this amendment, Claims 6-16 and 47-69 will be pending. Claim 11 has been allowed. For the reasons stated above, Applicants believe amended claims 6-10 and 12-16, and new claims 47-69 are also in condition for allowance.

CONCLUSION

For the reasons set forth above, it is respectfully submitted that Applicants' claims as amended should proceed to allowance. No fee is believed due. If a fee is required in connection with this paper, please charge Pennie & Edmonds Deposit Account Number 16-1150 for the appropriate amount.

Respectfully submitted,  47,167  
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Date March 26, 2001

  
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**EXHIBIT A**  
**MARKED VERSION OF THE CLAIMS**  
**U.S PATENT APPLICATION SERIAL NO. 09/060,409**

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6. (Amended) A method for producing a conditionally-immortalized dorsal root ganglion progenitor cell, comprising:

(a) transfecting dorsal root ganglion progenitor cells plated on a first surface and in a first growth medium that permit proliferation with DNA encoding a selectable marker and a regulatable [growth-promoting gene] oncogene; and

(b) passaging the transfected cells onto a second surface and in a second growth medium that permit attachment and proliferation; and therefrom producing a conditionally-immortalized dorsal root ganglion progenitor cell.

9. (Amended) A method according to claim 6 wherein the first and second surfaces are independently selected, and wherein the first and second surfaces comprise one or more substrates selected from the group consisting of [substrates comprising one or more of] a polyamino acid, fibronectin, laminin, collagen [or] and tissue culture plastic.

10. (Amended) The method of claim 6 wherein the [growth-promoting gene is an] oncogene is selected from the group consisting of v-myc, N-myc, c-myc, SV40 large T antigen, polyoma large T antigen, E1a adenovirus and E7 protein of human papillomavirus.

12. (Amended) A conditionally-immortalized dorsal root ganglion progenitor cell containing an oncogene, wherein the cell is capable of differentiation into neurons upon substantial inhibition of the activity of the oncogene.

13. (Amended) A cell according to claim 12, wherein the cell is a [transfected] rat dorsal root ganglion progenitor cell transfected with an oncogene.

14. (Amended) A cell according to claim 12, wherein the cell is a [transfected] human dorsal root ganglion progenitor cell transfected with an oncogene.